

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF U.S. 219 AND MD 135/NINTH STREET IN GARRETT COUNTY, MARYLAND. U.S. 219 IS ASSUMED TO RUN IN NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE U.S. 219 (EAST OAK STREET)/MD 135 APPROACHES OPERATING CONCURRENTLY AND THE U.S. 219 (GARRETT HIGHWAY)/NINTH STREET APPROACHES OPERATING CONCURRENTLY.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, VIDEO INTERFACE EQUIPMENT (1-8 CAMERAS), INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.02-09 (FLAGGING OPERATION)

STANDARD NO. MD-104.02-13 (INTERSECTION FLAGGING OPERATION)

STANDARD NO. MD-104.06-10 (MOBILE WORK)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. GEORGE H. SMALL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 729-8444

MR. GARY SHANK
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 729-8457

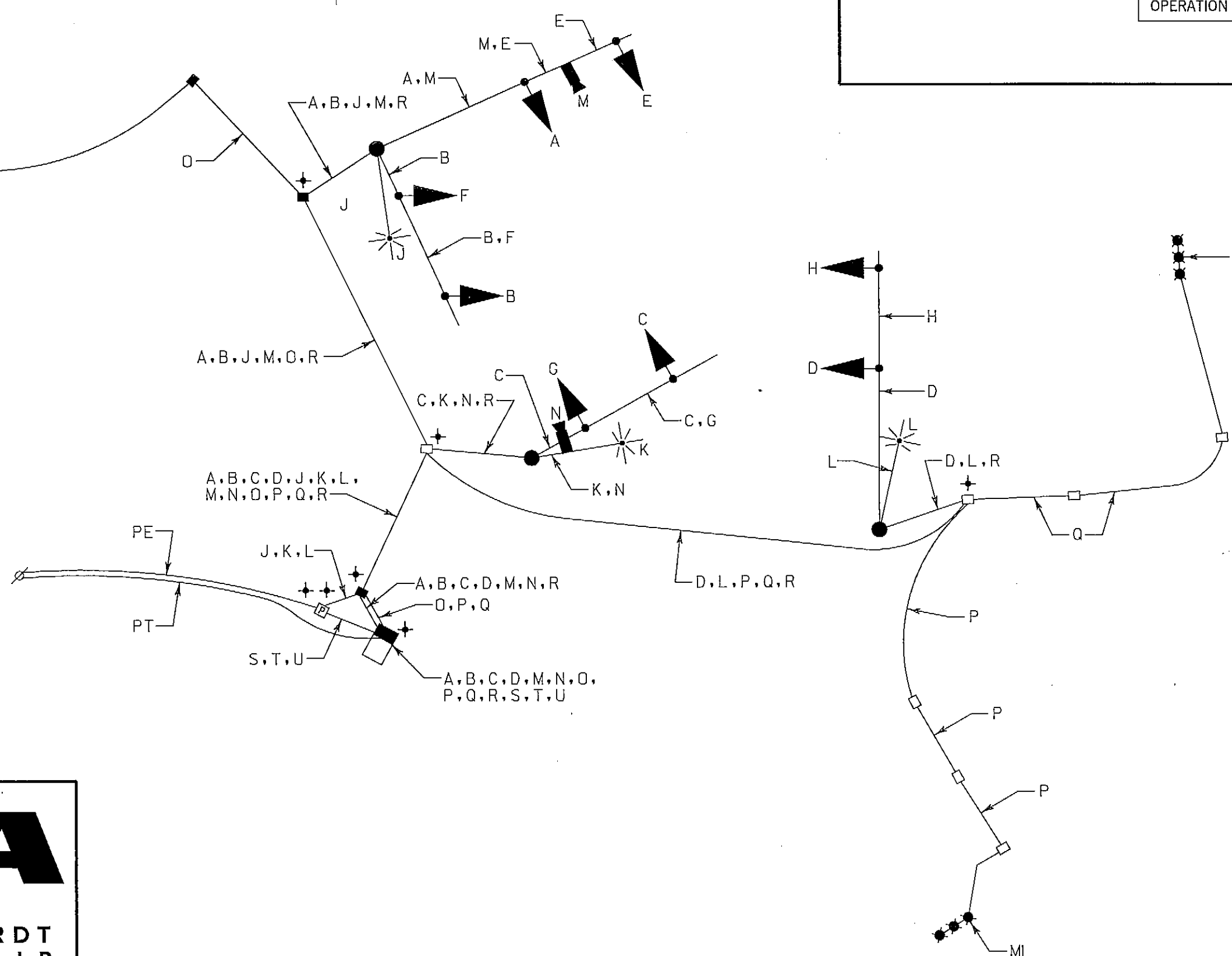
MR. DAVE FELKER
DISTRICT UTILITY ENGINEER
PHONE: (301) 729-8439

CHIEF JOHN SINES
OAKLAND CITY POLICE
PHONE: (301) 334-2100

MR. DWAYNE BITTNER
RESIDENT MAINTENANCE ENGINEER
PHONE: (301) 746-8141

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

WIRING DIAGRAM



EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
9044	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
9086	1 EACH	VIDEO INTERFACE EQUIPMENT: 1-8 CAMERAS
9571	49 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 4 EACH D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT - 1 EACH R1-2 SIGN (36 IN. x 36 IN. x 36 IN.) - GROUND MOUNT

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART



	1	2	3	4	5	6	7	8
	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)
PHASE 2 AND 6	G	G	G	G	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R
PHASE 4 AND 8	R	R	R	R	G	G	G	G
4 AND 8 CHANGE	R	R	R	R	Y	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

WIRING KEY

A B C D	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
E F G H	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
J K L	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) - TRAY CABLE
M N	VIDEO CAMERA DETECTION LEAD-IN CABLE
O P Q	MICROLOOP PROBE LEAD-IN
R	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
S T U	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

ML - MICROLOOP PROBE SET
PT - PROPOSED UNDERGROUND TELEPHONE SERVICE
PE - PROPOSED UNDERGROUND ELECTRICAL SERVICE
+ - 3/4 IN. X 10 FT. GROUND ROD

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EACH	MAINTENANCE OF TRAFFIC
2002	5 C.Y.	TEST PIT EXCAVATION
5001	5 L.F.	5 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5003	65 L.F.	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5006	35 L.F.	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
8001	24 EACH	12 INCH LED SIGNAL HEAD SECTION
8011	1 EACH	EMBEDDED METERED SERVICE PEDESTAL
8022	1 EACH	MAST ARM POLE & 38 FT MAST ARM ANY 'T' DIMENSION
8025	1 EACH	MAST ARM POLE & 60 FT MAST ARM ANY 'T' DIMENSION
8026	3 EACH	MICROLOOP PROBE (ANY LENGTH) LEAD IN CABLE UP TO 1000 FT
8029	1 EACH	REM & DISPOSE MAT & EQUIP PER ASSIGN
8030	1 EACH	TWIN MAST ARM POLE & 50 FT/50 FT MAST ARMS ANY 'T' DIMENSION
8034	2 EACH	VIDEO DETECTION CAMERA & CABLE
8041	200 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8043	700 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8044	17 L.F.	WOOD SIGN SUPPORTS UP TO 4 X 6
8046	49 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
8048	330 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8051	20 L.F.	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8053	90 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG - THHN/THWN
8054	4 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8058	3 EACH	250 WATT HIGH PRESSURE SODIUM LAMP & LUMINAIRE
8060	2 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8064	80 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8065	835 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8066	570 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC
8068	80 L.F.	SAW CUT FOR SIGNAL (LOOP DETECTOR)
8069	3 EACH	15 FT. LIGHTING ARM ON SIGNAL STRUCTURE
8073	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT

TOD NO: XX321-07
SHA NO: GA203A51/B51
US 219; MD 135 @ US 219/Ninth Street



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 219 (East Oak Street)/MD 135 (Maryland Hwy) and Ninth Street/US 219 (Garrett Hwy)
Oakland, Maryland

GENERAL INFORMATION SHEET

SCALE NONE ADVERTISED DATE 12/14/2010 CONTRACT NO. XX3215185

DESIGNED BY S. Bloss COUNTY Garrett
DRAWN BY S. Bloss LOGMILE 13.219010.73
CHECKED BY N. Leary TMS NO. K622
F.A.P. NO. TOD NO.

TS NO. 317D DRAWING TSP-3 OF 3 SHEET NO. 3 OF 3

PLOTTED: 12-14-2010
FILE: N:\01680-085\CADD\p83-N003_K622.dgn



WHITMAN, REQUARDT
& ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21201

BY: sbloss